

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. 2002-SW-54-AD; Amendment 39-13087; AD 2003-05-11]

RIN 2120-AA64

Airworthiness Directives; Bell Helicopter Textron Canada Model 407 Helicopters

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment supersedes an existing emergency airworthiness directive (EAD), which was sent previously to all known U.S. owners and operators of Bell Helicopter Textron Canada (Bell) helicopters by individual letters. That EAD requires a visual check to ensure that the two swashplate drive link cup washers (cup washers) are installed correctly. If a cup washer is installed incorrectly, removing and replacing the swashplate outer ring, each cup washer, bearing and liner, and drive link where the cup washer was installed incorrectly are also required. This amendment requires the same actions as the existing EAD, but clarifies that only the visual check may be performed by the owner/operator. This amendment is prompted by two reported failures of the stud portion of the swashplate drive link. The actions specified by this AD are intended to detect an incorrectly installed cup washer, which could limit the travel of the swashplate outer ring and lead to failure of the stud portion of the swashplate drive link, and subsequent loss of control of the helicopter.

DATES: Effective April 2, 2003.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of April 2, 2003.

Comments for inclusion in the Rules Docket must be received on or before May 19, 2003.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Office of the Regional Counsel, Southwest Region, Attention: Rules Docket No. 2002-SW-54-AD, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. You may also send comments electronically to the Rules Docket at the following address: 9-asw-adcomments@faa.gov.

The applicable service information may be obtained from Bell Helicopter Textron Canada, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4, telephone (450) 437-2862 or (800) 363-8023, fax (450) 433-0272. This information may be examined at the FAA, Office of the Regional Counsel,

Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Sharon Miles, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Regulations Group, Fort Worth, Texas 76193-0111, telephone (817) 222-5122, fax (817) 222-5961.

SUPPLEMENTARY INFORMATION: On November 13, 2002, the FAA issued EAD 2002-23-51 to require, before further flight, a visual check to ensure that the two cup washers are installed correctly. If either cup washer is installed incorrectly, removing and replacing the swashplate outer ring, each cup washer, bearing and liner, and drive link where the cup washer was installed incorrectly are also required. That action was prompted by two reported failures of the stud portion of the swashplate drive link. One or both cup washers may have been installed incorrectly. The requirements of that EAD are intended to detect an incorrectly installed cup washer, which could limit the travel of the swashplate outer ring and lead to failure of the stud portion of the swashplate drive link, and subsequent loss of control of the helicopter.

Bell has issued Bell Helicopter Textron Alert Service Bulletin No. 407-02-55, dated October 29, 2002, which describes procedures for a one-time visual check of both cup washers to ensure that they are correctly installed. The check must be accomplished before each flight. Transport Canada classified this alert service bulletin as mandatory and issued AD No. CF-2002-46, dated November 6, 2002, to ensure the continued airworthiness of these helicopters in Canada.

This helicopter model is manufactured in Canada and is type certificated for operation in the United States under the provisions of 14 CFR 21.29 and the applicable bilateral agreement. Pursuant to the applicable bilateral agreement, Transport Canada has kept the FAA informed of the situation described above. The FAA has examined the findings of Transport Canada, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

Since the issuance of that EAD, the FAA determined that the paragraphs in the AD should be restructured to clarify that only the visual check may be performed by an owner/operator.

Since an unsafe condition has been identified that is likely to exist or develop on other Bell Model 407 helicopters of the same type design, this AD supersedes EAD 2002-23-51 to require the same actions as the existing EAD—a visual check of the two cup washers; if a cup washer is installed incorrectly, remove and replace the swashplate outer ring, part number (P/N) 406-010-411-117, each cup washer, P/N 406-010-412-101, bearing and liner, P/N 406-010-417-101, and drive link, P/N 406-010-426-101, where the cup washer was installed incorrectly. This AD reorganizes the intended requirements of the existing EAD. The actions must be accomplished in accordance with the service bulletin described previously. The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the controllability and structural integrity of the helicopter. Therefore, the visual check and replacements, if necessary, are required before further flight and this AD must be issued immediately.

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

The FAA estimates that 294 helicopters of U.S. registry will be affected by this AD, that it will take approximately 0.5 work hours per helicopter to accomplish the visual checks and 12 work hours per helicopter to replace certain parts, as necessary, and that the average labor rate is \$60 per work hour. Required parts will cost approximately \$17,549 per helicopter. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$5,379,906.

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the location provided under the caption ADDRESSES.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39—AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding a new airworthiness directive (AD), Amendment 39-13087, to read as follows:

AIRWORTHINESS DIRECTIVE

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "www.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2003-05-11 Bell Helicopter Textron Canada: Amendment 39-13087. Docket No. 2002-SW-54-AD. Supersedes Emergency AD 2002-23-51, Docket No. 2002-SW-51-AD.

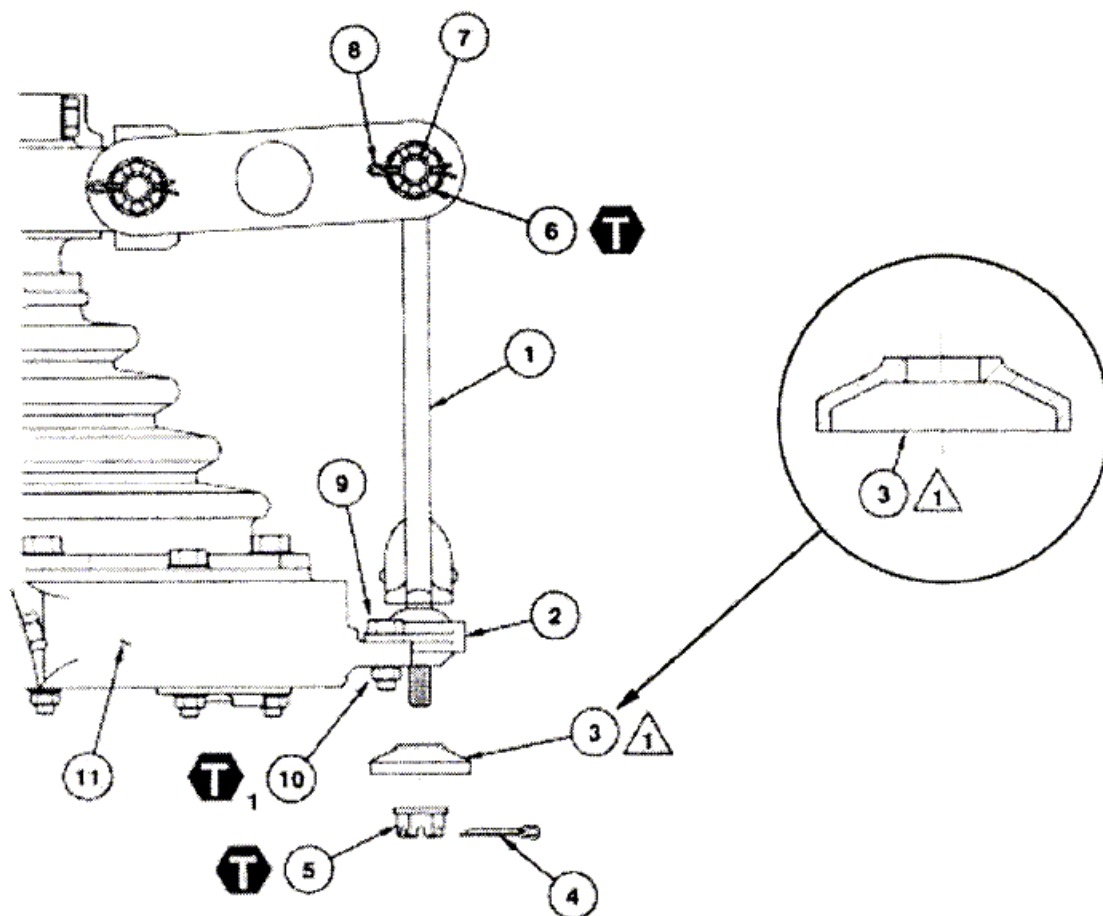
Applicability: Model 407 helicopters, serial numbers 53000 through 53538, certificated in any category.

Note 1: This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required before further flight, unless accomplished previously.

To detect an incorrectly installed swashplate drive link cup washer (cup washer), which could limit the travel of the swashplate outer ring and lead to failure of the stud portion of the swashplate drive link, and subsequent loss of control of the helicopter, accomplish the following:

(a) Visually check both cup washers, part number (P/N) 406-010-412-101, for correct installation in accordance with Figure 1 of this AD. If both cup washers are installed correctly, no further action is required. This visual check may be performed by an owner/operator (pilot) holding at least a private pilot certificate, and must be entered into the aircraft records showing compliance with this paragraph in accordance with sections 43.11 and 91.417(a)(2)(v) of the Federal Aviation Regulations (14 CFR sections 43.11 and 91.417(a)(2)(v)). See the following Figure 1:



OPPOSITE SIDE TYPICAL

LEGEND

1. Drive link (406-010-426-101)
2. Bearing and liner (406-010-417-101)
3. Cup washer (406-010-412-101)
4. Cotter pin (MS24655-155)
5. Nut (MS14144L5)
6. Nut (MS14144L5)
7. Bolt (NAS6605D61)
8. Cotter pin (MS24655-155)
9. Bolt (NAS6204-7)
10. Nut (MS21042L4)
11. Swashplate outer ring (406-010-411-117)

T 120 TO 160 IN-LB
(13.6 TO 18.1 N-m)

T₁ 75 TO 95 IN-LB
(8.47 TO 10.7 N-m)

NOTES

- 1** Washer shown is correctly installed.
2. Washers under bolt head (9) and nut (10) are not shown for clarity.

Figure 1. Correct cup washer direction, installation of

(b) If a cup washer is installed incorrectly, remove and replace the swashplate outer ring, each cup washer, bearing and liner, and drive link where the cup washer was installed incorrectly. Replace these parts in accordance with Part II of the Accomplishment Instructions in Bell Helicopter Textron Alert Service Bulletin No. 407-02-55, dated October 29, 2002.

Note 2: In Part II, step 3.a. of the alert service bulletin, the swashplate is incorrectly referenced as item 10 of Figure 1. The reference should state item 11.

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Regulations Group, Rotorcraft Directorate, FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Regulations Group.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Regulations Group.

(d) Special flight permits will not be issued.

(e) The removals and replacements, if necessary, shall be done in accordance with the Accomplishment Instructions in Bell Helicopter Textron Alert Service Bulletin No. 407-02-55, dated October 29, 2002. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Bell Helicopter Textron Canada, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4, telephone (450) 437-2862 or (800) 363-8023, fax (450) 433-0272. Copies may be inspected at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

(f) This amendment becomes effective on April 2, 2003.

Note 4: The subject of this AD is addressed in Transport Canada (Canada) AD No. CF-2002-46, dated November 6, 2002.

Issued in Fort Worth, Texas, on March 6, 2003.

David A. Downey,

Manager, Rotorcraft Directorate, Aircraft Certification Service.

[FR Doc. 03-6136 Filed 3-17-03; 8:45 am]

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